



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/118,359	07/17/1998	J. DENNIS KELLER	MI22-587	8927
21567	7590	07/26/2002		
WELLS ST. JOHN ROBERTS GREGORY & MATKIN P.S. 601 W. FIRST AVENUE SUITE 1300 SPOKANE, WA 99201-3828			EXAMINER	
			ESTRADA, MICHELLE	
		ART UNIT	PAPER NUMBER	
		2823		
DATE MAILED: 07/26/2002				

Please find below and/or attached an Office communication concerning this application or proceeding.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 7, 9, 41, 42, 51-57, 62, 63, 66 and 68 are rejected under 35 U.S.C. 102(e) as being anticipated by Araki et al.

The rejection is applied as stated in the office action mailed 2/12/02.

Araki et al. disclose forming source and drain regions laterally proximate the floating gate (Col. 4, lines 63-67).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3-6, 8, 10-14, 25-31, 43-50, 58-61, 64, 65 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Araki et al. as applied to claims 1, 2, 7, 9, 41, 42 and 51-57 above, and further in view of the stated examiner's comments.

The rejection is applied as stated in the office action mailed 2/12/02.

***Response to Arguments***

Applicant's arguments filed May 13, 2001 have been fully considered but they are not persuasive. In response to applicant's arguments, the recitation "A method for enhancing data retention of a floating gate transistor" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). Furthermore, Araki et al. disclose forming a floating gate at Col. 4, lines 60-62.

Art Unit: 2823

In response to applicant's forceful allegation that it is "bizarre" to argue that a 3 layer structure with the first layer being undoped is encompassed by the claim language, applicant is directed to the office actions mailed 2/12/02, 10/16/01 and 9/25/01, where the reasoning behind such an argument has been stated.

Applicant is incorrect that the rejection requires calling a 3-layer structure a 2-layer structure. The rejection is based on Araki et al. disclosing a 2-layer structure, notwithstanding the labeling of the structure as 3-layers by Araki et al. Such an interpretation is not inconsistent. As stated in the office action mailed 2/12/02, the claims do not require that the "inner first portion" be uniformly doped or of a homogeneous composition. Applicant has not provided a convincing argument that the inner first portion of the gate disclosed by Araki et al. comprising the doped and undoped portion is not encompassed by the recitation of "inner first portion".

In response to applicant's argument that Araki et al. does not disclose doping the inner first portion as recited, the reference discloses forming a region having a concentration of  $1 \times 10^{20} \text{ cm}^{-3}$  in the inner first portion as recited. Alternatively, the concentration in the total volume is  $0.5 \times 10^{20} \text{ cm}^{-3}$  because the undoped portion of the inner first portion is the same thickness as the doped portion of the inner first portion.

Applicant's misunderstanding of the meaning of "could be characterized by" has been addressed in the office action mailed 2/12/02.

Applicant argues that a number of U.S. Patents would not have been allowed given the reasoning relied on in the office action mailed 2/12/02. However, each application is evaluated on its own merits. The claim language has merely been given

Art Unit: 2823

the broadest reasonable interpretation, which has been explained above. See MPEP 2111.

The fact that Araki et al. discloses the claimed invention is sufficient evidence that the reference provides an enabling disclosure. Applicant appears to argue that the reference must provide an enabling disclosure for subject matter that is not claimed. However, this is not necessary as stated in the office action mailed 2/12/02.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, motivation has been provided in the office actions mailed 2/12/02, 10/16/01, 9/25/01 and 10/11/00.

Applicant's remaining arguments have been addressed in the office actions mailed 2/12/02, 10/16/01 and 9/25/01.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

Art Unit: 2823

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle Estrada whose telephone number is 703-308-0729. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 703-308-4918. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 (7724, 3431 and 3432) for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

  
George Fourson  
Primary Examiner  
Art Unit 2823

  
MEstrada  
July 18, 2002



Creation date: 02-02-2004

Indexing Officer: KKAMBAY - KHOUTHONG KHAMBAY

Team: OIPEBackFileIndexing

Dossier: 09118359

Legal Date: 10-29-2002

No.	Doccode	Number of pages
1	A...	1
2	CLM	18
3	REM	28
4	LET.	2
5	IDS	1

Total number of pages: 50

Remarks:

Order of re-scan issued on .....